

REMARKS

This amendment is responsive to the office action dated October 17, 2006.

Claims 1-3, 7-28 and 31-47 were pending in the application. Claims 28, 31, 39-42, 44 and 45 were rejected. Claims 1-3, 7-27, 46 and 47 were allowed. Claims 32-38 and 43 were determined allowable but were objected to.

By way of this amendment, the Applicant has amended claims 28 and 39. Claims 1-3, 7-27, 31-38 and 40-47 remain unchanged.

Accordingly, Claims 1-3, 7-28 and 31-47 are currently pending.

I. REJECTION OF CLAIMS UNDER 35 USC 102

Claims 39, 41, 44 and 45 were rejected under 35 USC 102(e), as being anticipated by US Patent No. 6,445,471 (Shimokawa et al.). The basis for the Examiner's rejection was set forth in the Office Action at pages 2-3.

The Applicant has amended claims 39 of the present application to require a method step whereby the data signal is transmitted to a power splitter that splits the transmitted data signal into a first and second low powered signal and a third high powered signal. Further, the claim has been amended to require that the first low powered signal be read by a first detector to determine its high frequency characteristics and that the second low powered signal be read by a second detector to determine its source parameters.

In contrast, the device in Shimokawa does not describe a single power splitter for generating two low powered signals that are each in turn read to determine a high frequency characteristic and a source parameter related to the data signal. The disclosure clearly provides for two different power splitters at two different locations to determine the strength of the optical signal before and after amplification. This is clear as photodiode 110 is coupled into the signal pre amplification and photodiode 112 is coupled to the signal after amplification and muxing of the signal 109. Accordingly, there is only a single reading at each of two different locations related to the power of the signal.

There is no disclosure within Shimokawa that describes the use of a single power splitter to generate three separate signal streams. Further, there is no disclosure in Shimolawa that is directed to the generation of two low powered data signals, one corresponding to high frequency characteristics of the signal and the second corresponding to source parameters of the data signal.

Since the independent claims of the present invention, as amended, include disclosure that is not found in the cited Shimokawa reference this rejection is no longer believed to be applicable. Further, since the remaining claims, claims 41, 44 and 45, are dependant on the now allowable independent claim 39, these claims are also believed to be allowable. Accordingly, withdrawal of this rejection is respectfully requested.

II. REJECTION OF CLAIMS UNDER 35 USC 103

Claims 40 and 42 were rejected under 35 USC 103(a) as being unpatentable over Shimokawa in view of US Patent No 5, 546,325 (Aulet). The Examiner has stated that although Shimokawa does not demonstrate the use of spec compliant testing and various high frequency characteristics, such disclosure is provided in Aulet that the present invention is obvious in light of the combination of these references.

However, as was stated above with respect to Shimokawa alone, the base reference is lacking in a teaching that describes that describes the use of a single power splitter to generate three separate signal streams as is required in Claim 39 as amended. Further, there is no disclosure in Shimokawa that is directed to the generation of two low powered data signals, one corresponding to high frequency characteristics of the signal and the second corresponding to source parameters of the data signal. Accordingly, withdrawal of this rejection is respectfully requested.

III. REJECTION OF CLAIMS UNDER 35 USC 103

Claims 28 and 31 were rejected under 35 USC 103(a) as being unpatentable over Shimokawa in view of US Patent No. 6,842,587 (McGhan). The Examiner has applied Shimokawa as was disclosed in the rejection of Claim 39 above. The Examiner

stated that Shimokawa discloses the present invention including the step of splitting the data signal because Claim 28 does not include any structural details regarding the manner in which this step is performed. The Examiner further stated that while Shimokawa does not disclose first and second low powered signals while the data signal remained a high powered signal, McGhan provides this disclosure through the use of couplers and that the present invention is obvious in view of a combination of these references.

However, as was stated above, the device in Shimokawa does not describe a single power splitter for generating two low powered signals that are each in turn read to determine a high frequency characteristic and a source parameter related to the data signal. The disclosure clearly provides for two different power splitters at two different locations to determine the strength of the optical signal before and after amplification. This is clear as photodiode 110 is coupled into the signal pre amplification and photodiode 112 is coupled to the signal after amplification and muxing of the signal 109. Accordingly, there is only a single reading at each of two different locations related to the power of the signal.

There is no disclosure within Shimokawa that describes the use of a single power splitter to generate three separate signal streams. Further, there is no disclosure in Shimolawa that is directed to the generation of two low powered data signals, one corresponding to high frequency characteristics of the signal and the second corresponding to source parameters of the data signal.

Further there is no disclosure in McGhan that is directed to the generation of two low powered data signals, one corresponding to high frequency characteristics of the signal and the second corresponding to source parameters of the data signal. Finally there is no disclosure in McGhan that provides for the two low powered signals to be passed separately to the control circuit wherein they are each used separately to make a control decision.

The Applicant has amended Claim 28 to include specific structure for simultaneously splitting the signal into at least two low powered signals and a third high powered signal.

Since Claim 28 as amended includes limitations that are simply not taught by either of the cited references either alone or in combination, this rejection cannot be maintained. Further since Claim 31 is dependent on now allowable Claim 28, it is also believed to be in condition for allowance. Accordingly, withdrawal of this rejection is respectfully requested.

IV. ALLOWABLE SUBJECT MATTER

The Examiner indicated that Claims 1-3, 7-27, 46 and 47 were allowed. Further, claims 32-38 and 43 were held allowable but objected to as being dependent on rejected base claims. Claims 28 and 39 have been amended and are now also believed to be allowable thereby making the dependent claims that depend therefrom allowable as well.

V. CONCLUSION

Accordingly, Claims 1-3, 7-28 and 31-47 are believed to be in condition for allowance and the application ready for issue.

Corresponding action is respectfully solicited.

PTO is authorized to charge any additional fees incurred as a result of the filing hereof or credit any overpayment to our account #02-0900.

Respectfully submitted,

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